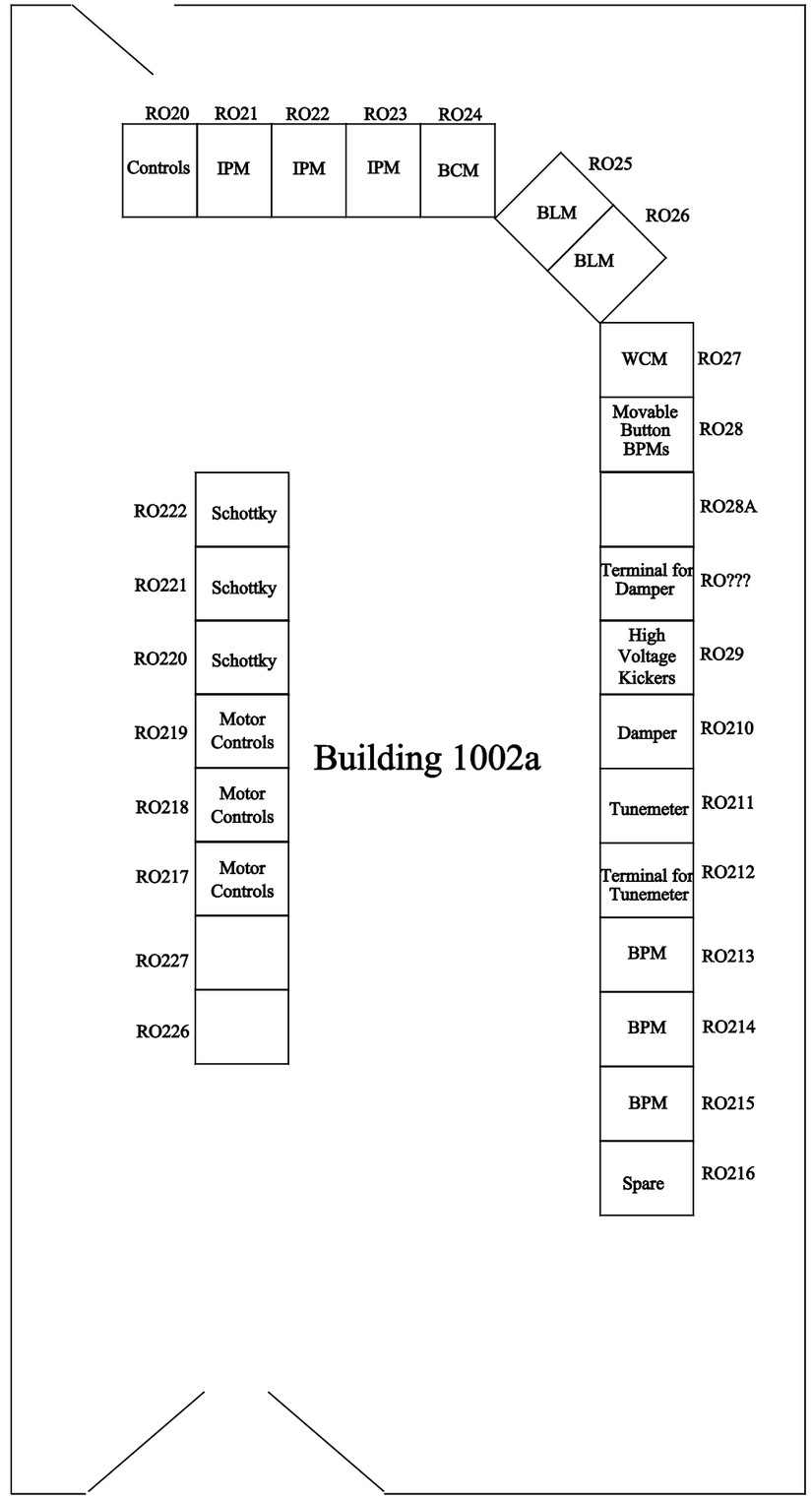
Controls, C-AD 5/15/2003 2:14 PM 8720.dwg



REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.-BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	Ed Koropsak	5/15/03
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	Rob Michnoff	
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG 1002A TUNE METER

FLOOR LAYOUT

SIZE D

94028720

DRAWING NUMBER

REV. A

MATERIAL:

SCALE: FULL

WEIGHT:

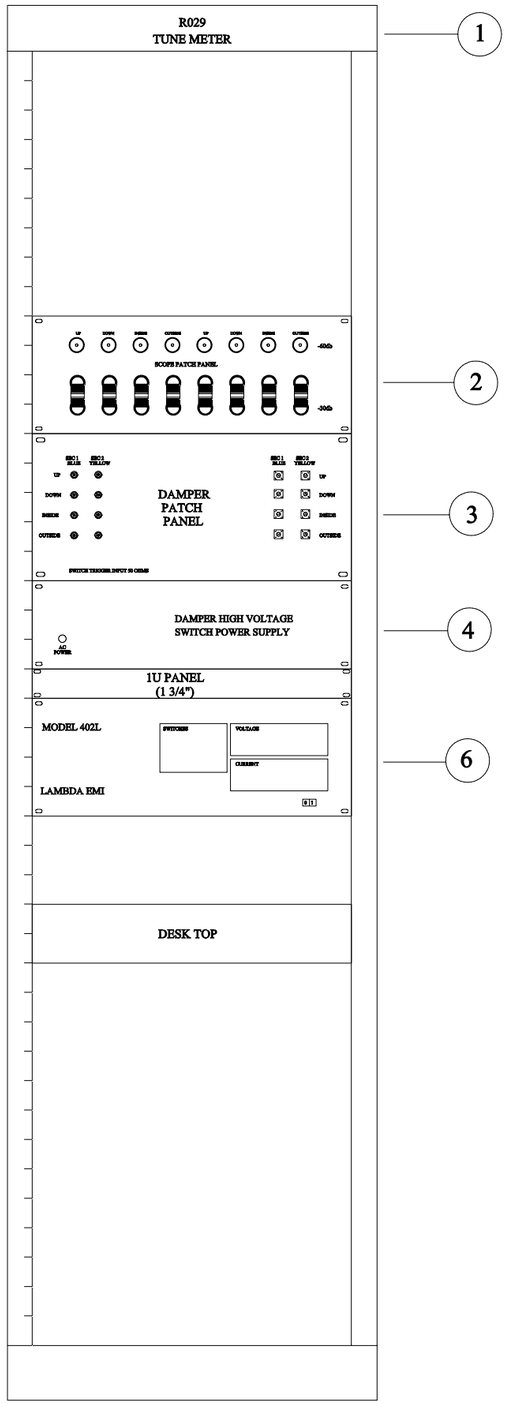
SHEET 1

*AUTOCAD

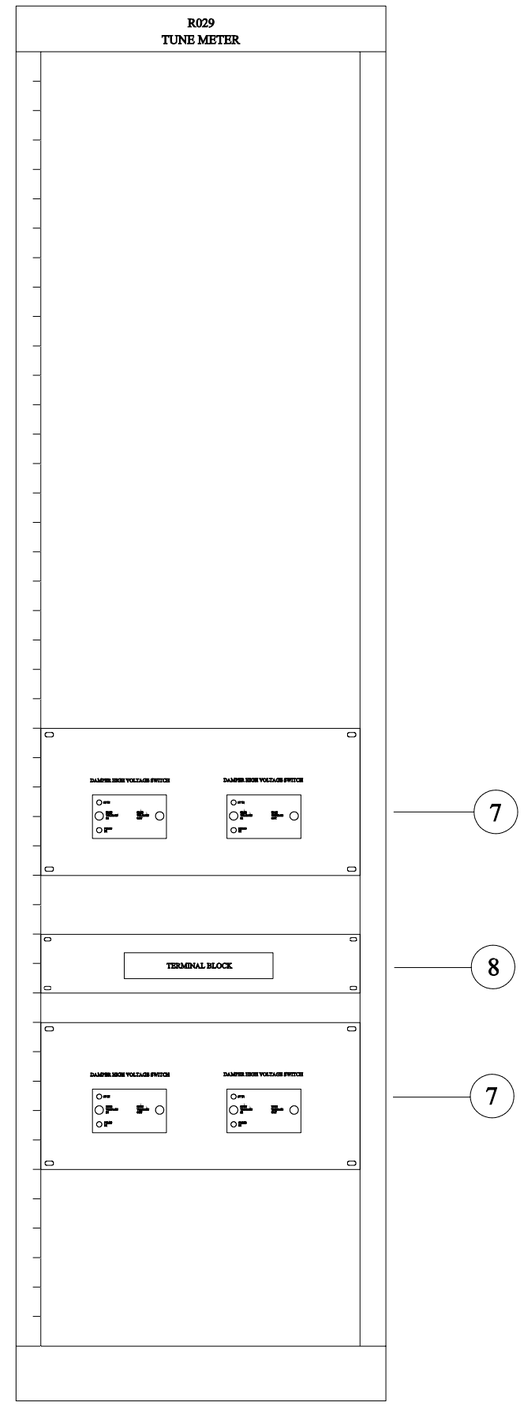
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

BNL, BNL 4/19/00 9:54 AM 8822.dwg

FRONT VIEW



REAR VIEW



QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,BNL NO.
		AR	NA	10	10x32 SCREWS 1/2" BINDHEAD SCREWS	T-32276
		AR	NA	9	BLANK PANELS	X
		1	NA	8	2U TERMINAL BLOCK PANEL	X
		8	NA	7	HIGH VOLTAGE SWITCHES	X
		1	NA	6	LAMBDA EMI MODEL 402L POWER SUPPLY	X
		1	NA	5	1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553)	X
		1	NA	4	DAMPER HIGH VOLTAGE SWITCH POWER SUPPLY	X
		1	NA	3	DAMPER PATCH PANEL	X
		1	NA	2	SCOPE PATCH PANEL	X
		1	NA	1	19" RACK, 77" H RACK SPACE	X

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Al Watson	3/8/00
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1002A TUNE METER

RACK R029

SIZE D | DRAWING NUMBER 94028822 | REV. A

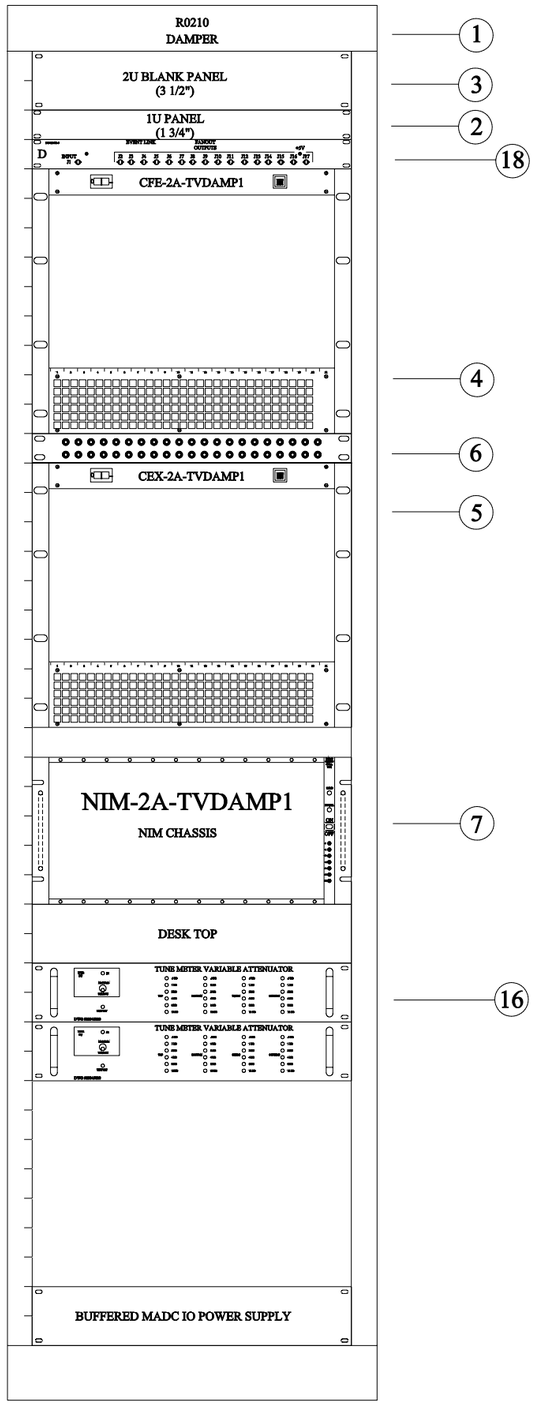
MATERIAL: | SCALE: FULL | WEIGHT: | SHEET 1

1 *AUTOCAD

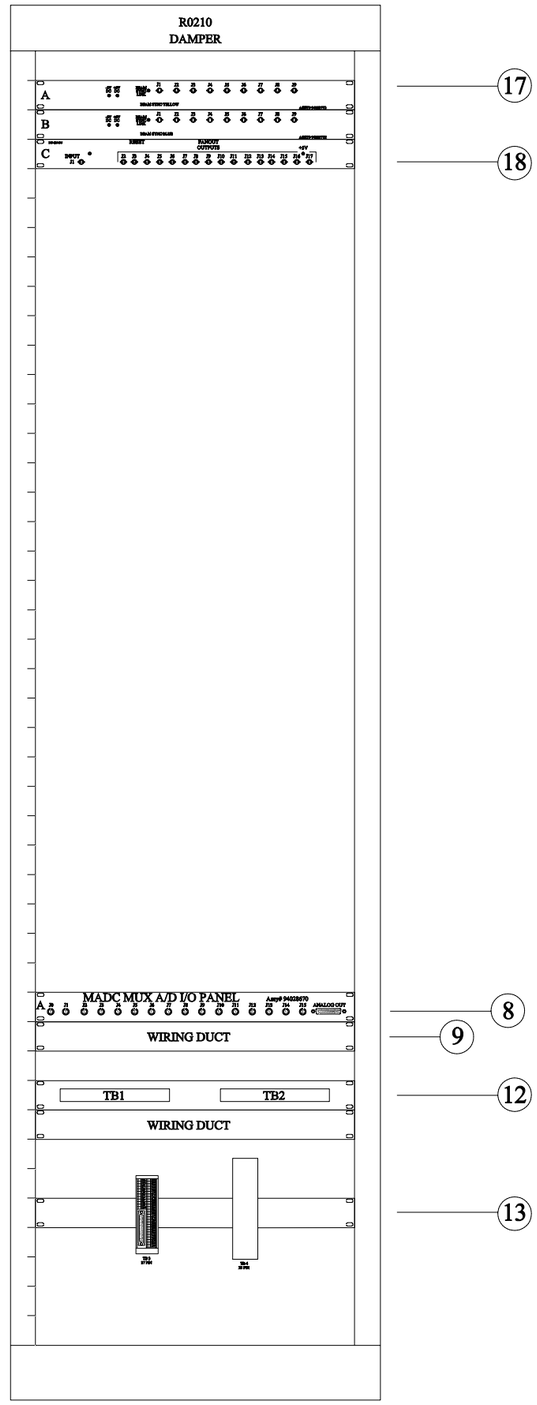
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

Controls, C-AD 5/27/2003 1:26 PM 8823.dwg

FRONT VIEW



REAR VIEW



QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,BNL NO.
		1	NA	19	BUFFERED MADC I/O POWER SUPPLY	94028808
		2	NA	18	TIMELINE FANOUT ASSEMBLY	D09-E2442
		2	NA	17	BEAM SYNC FANOUT	94028772
		2	NA	16	PROGRAMMABLE VARIABLE ATTENUATOR	82045020
		AR	NA	15	10x32 1/2" BINDHEAD MACHINE SCREWS	T-32276
		AR	NA	14	BLANK PANELS	X
		1	NA	13	TB3/TB4 TERMINAL PANEL	X
		1	NA	12	TB1/TB2 TERMINAL PANEL	X
		4	NA	11	WIRE DUCT SNAP CLIPS 1.5"W (PANDUIT SNS1.5-C)	X
		2	NA	10	WIRE DUCT COVER 1.5"W (PANDUIT C1.5LG6)	X
		2	NA	9	WIRE DUCT 1.5"W x 4"D (PANDUIT E1.5x4LG6)	X
		1	NA	8	MADC I/O PANEL	94028183
		1	NA	7	NIM CHASSIS NIM-2A-TVDAMP1	
		1	NA	6	GROMMET PANEL	94028410
		1	NA	5	VME CHASSIS CEX-2A-TVDAMP1	X
		1	NA	4	VME CHASSIS CFE-2A-TVDAMP1	X
		1	NA	3	2U x 19' BLANK PANEL (PREMIER METAL ARP-319-553)	X
		3	NA	2	1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553)	X
		2	NA	1	19" RACK, 77" H RACK SPACE	X

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Ed Koropsak	5/15/03
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	Rob Michnoff	
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1002A DAMPER

RACK R0210

SIZE D

DRAWING NUMBER 94028823

REV. A

MATERIAL:

SCALE: FULL

WEIGHT:

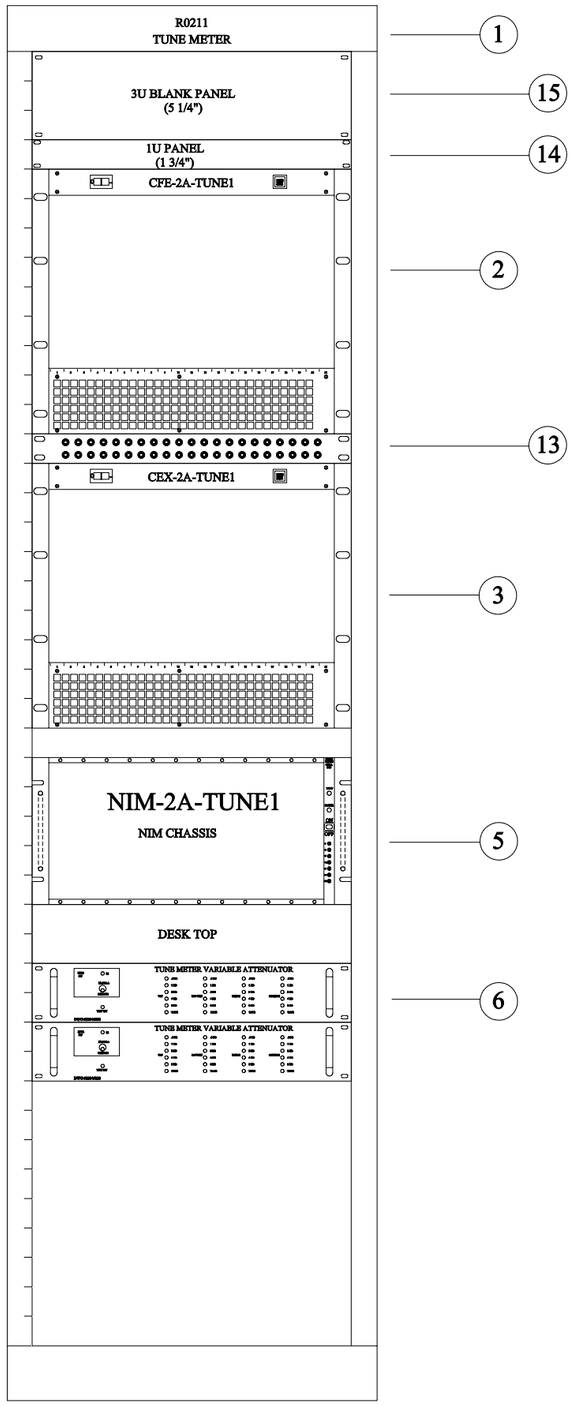
SHEET 1

*AUTOCAD

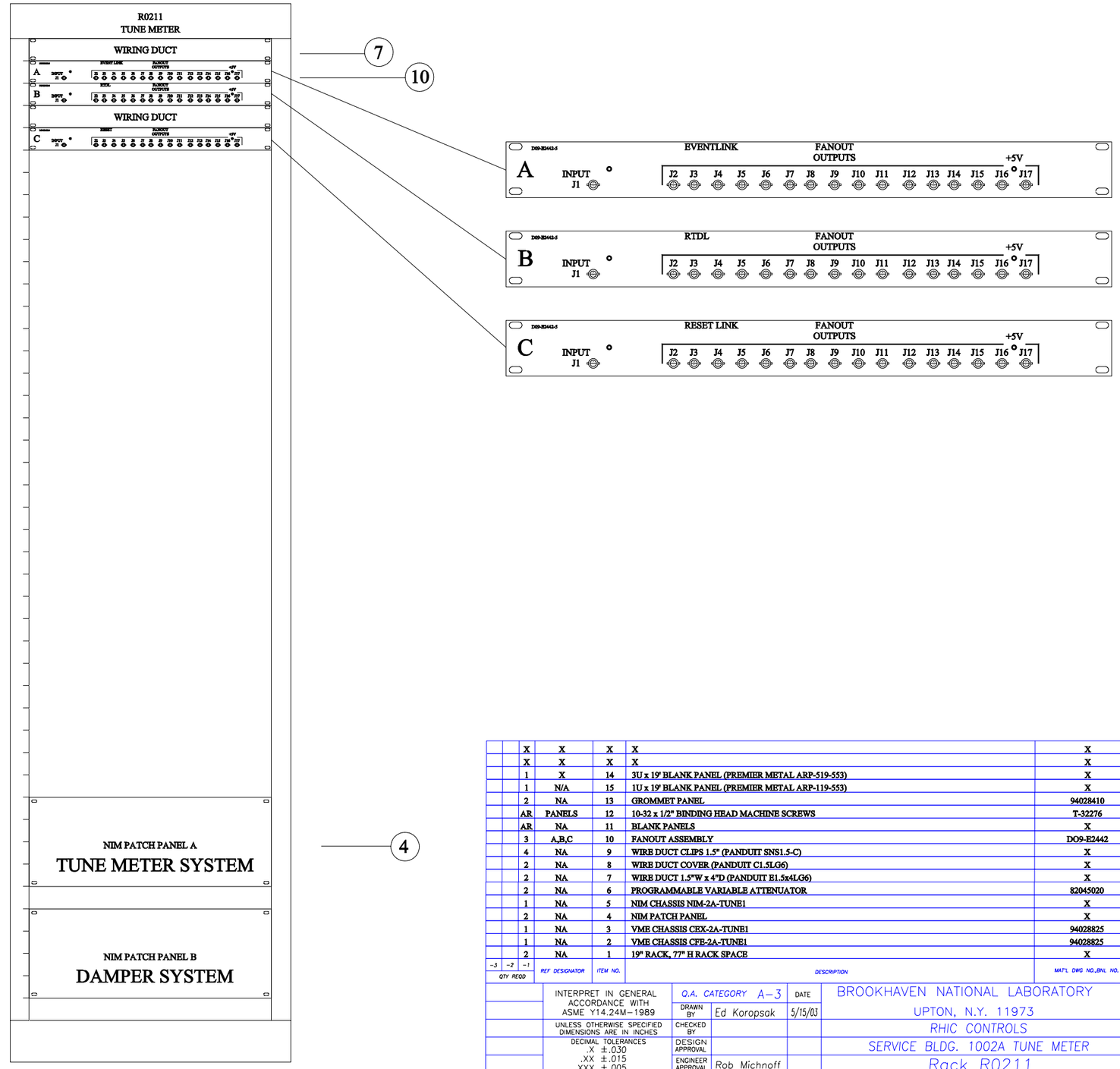
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

Controls, C-AD 5/27/2003 1:33 PM 8824.dwg

FRONT VIEW



REAR VIEW



QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,BNL NO.
		X	X	X	X	X
		X	X	X	X	X
		1	X	14	3U x 19' BLANK PANEL (PREMIER METAL ARP-519-553)	X
		1	N/A	15	1U x 19' BLANK PANEL (PREMIER METAL ARP-119-553)	X
		2	NA	13	GROMMET PANEL	94028410
		AR	PANELS	12	10-32 x 1/2" BINDING HEAD MACHINE SCREWS	T-32276
		AR	NA	11	BLANK PANELS	X
		3	A,B,C	10	FANOUT ASSEMBLY	DO9-E2442
		4	NA	9	WIRE DUCT CLIPS 1.5" (PANDUIT SNS1.5-C)	X
		2	NA	8	WIRE DUCT COVER (PANDUIT C1.5LG6)	X
		2	NA	7	WIRE DUCT 1.5"W x 4"D (PANDUIT E1.5x4LG6)	X
		2	NA	6	PROGRAMMABLE VARIABLE ATTENUATOR	82045020
		1	NA	5	NIM CHASSIS NIM-2A-TUNE1	X
		2	NA	4	NIM PATCH PANEL	X
		1	NA	3	VME CHASSIS CEX-2A-TUNE1	94028825
		1	NA	2	VME CHASSIS CFE-2A-TUNE1	94028825
		2	NA	1	19" RACK, 77" H RACK SPACE	X

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Ed Koropsak	5/15/03
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	Rob Michnoff	
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG. 1002A TUNE METER
Rack R0211

SIZE D
DRAWING NUMBER 94028824
REV. A

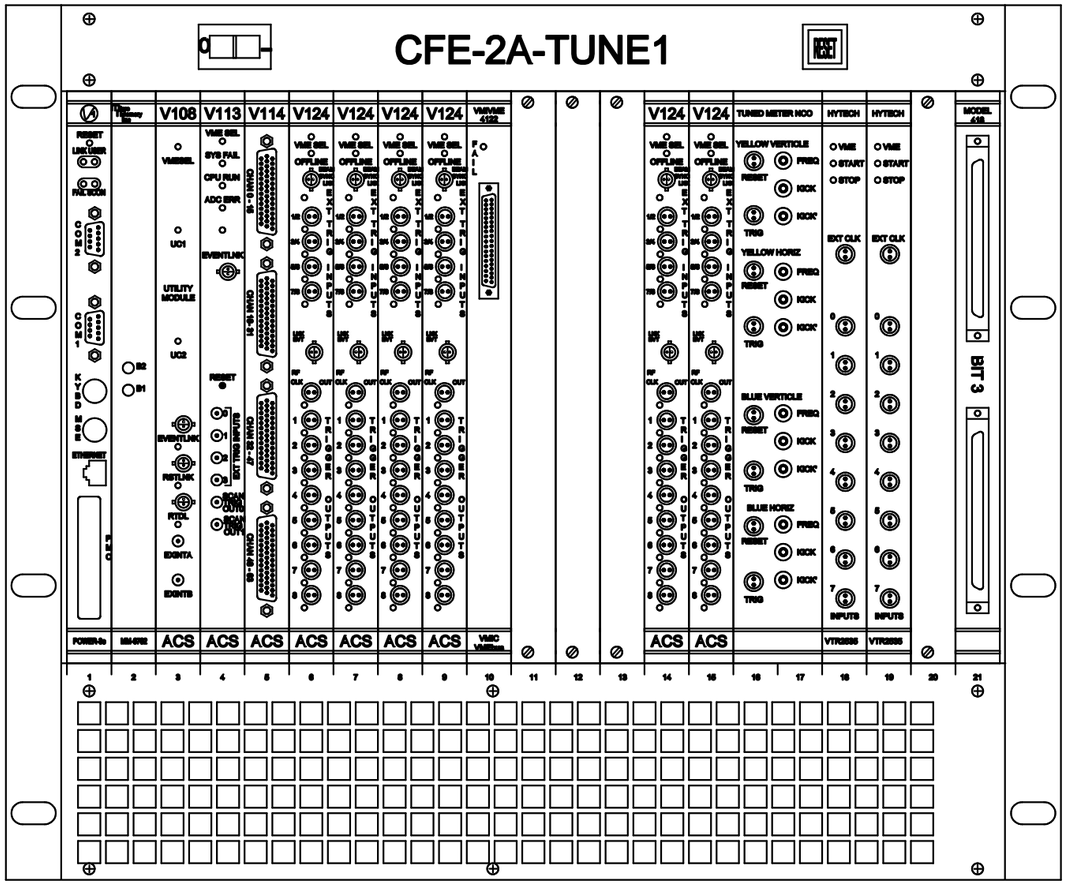
MATERIAL: SCALE: FULL WEIGHT: SHEET 1

*AUTOCAD

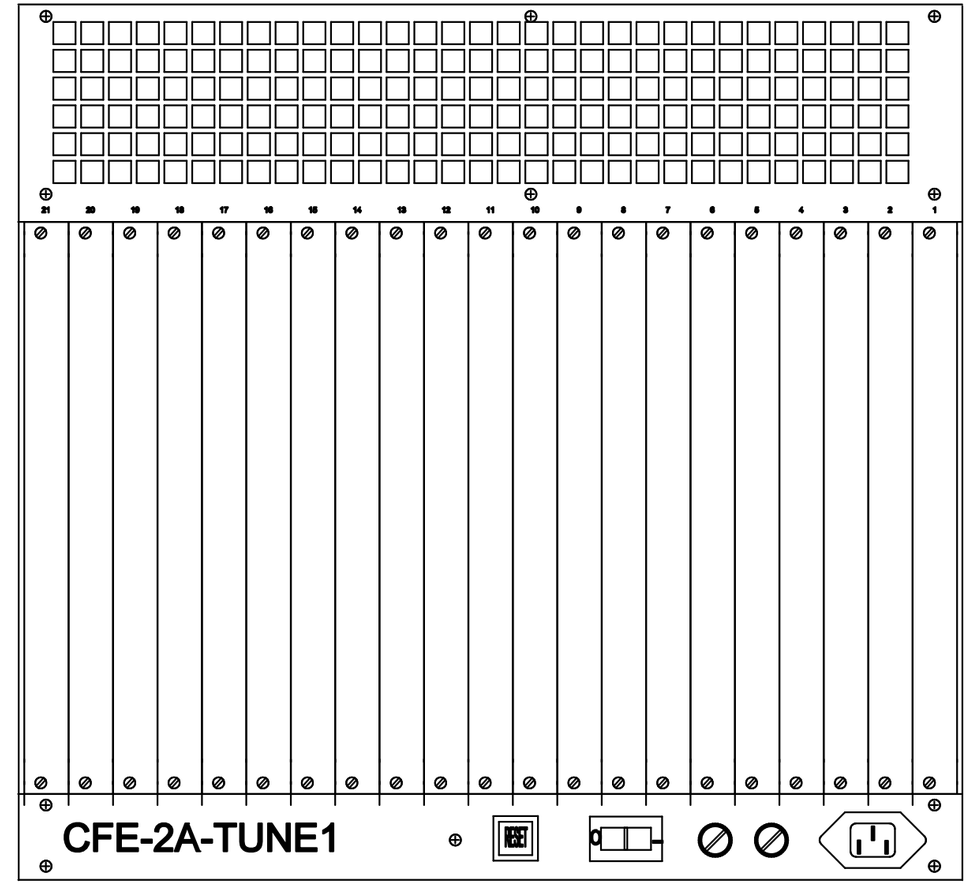
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

Controls, C-AD 5/13/2003 10:20 AM 8825_1.dwg

FRONT VIEW



REAR VIEW



NOTE 1:

ALL UNUSED SLOTS REQUIRE BLANK PANELS.

QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./MFG. NO.
		25	SEE NOTE 1	17	VME BLANK PANEL (ELECTRO-SPACE E9FE-2985)	
		1	SLOT 21	16	BIT 3 BUS EXTENDER	MODEL 418-101
		1	4+5	15	BACKPLANE JUMPER CABLE FOR V113/V114	
		2	SLOT 18,19	14	HYTEC VTR2535 8 CHAN, 10 MSAMPLE/SEC A/D	
		1	SLOT 16	13	NCO, NUMERICALLY CONTROLLED OSCILLATOR	XXXXXX
		6	SLOT 6-9,14,15	12	V124 BEAM SYNC TRIGGER MODULE	94028432
		1	CABLE	11	BIT 3 BUS CABLE B	82004119-1M
		1	CABLE	10	BIT 3 BUS CABLE A	82004118-1M
		-		9		
		1	SLOT 10	8	DAC MODULE, 8-CHAN, 12-BIT	VMI VME 4122-010
				7		
		1	SLOT 5	6	V114 MADC A/D CONVERTER MODULE	94028226
		1	SLOT 4	5	V113 MADC CONTROLLER MODULE	94028140
		1	SLOT 3	4	V108 UTILITY MODULE	94028094
		1	SLOT 2	3	MEMORY MODULE	MM-6702
		1	SLOT 1	2	FRONT END COMPUTER	POWER 3e
		1	N/A	1	VME CHASSIS	RHIC-93008000

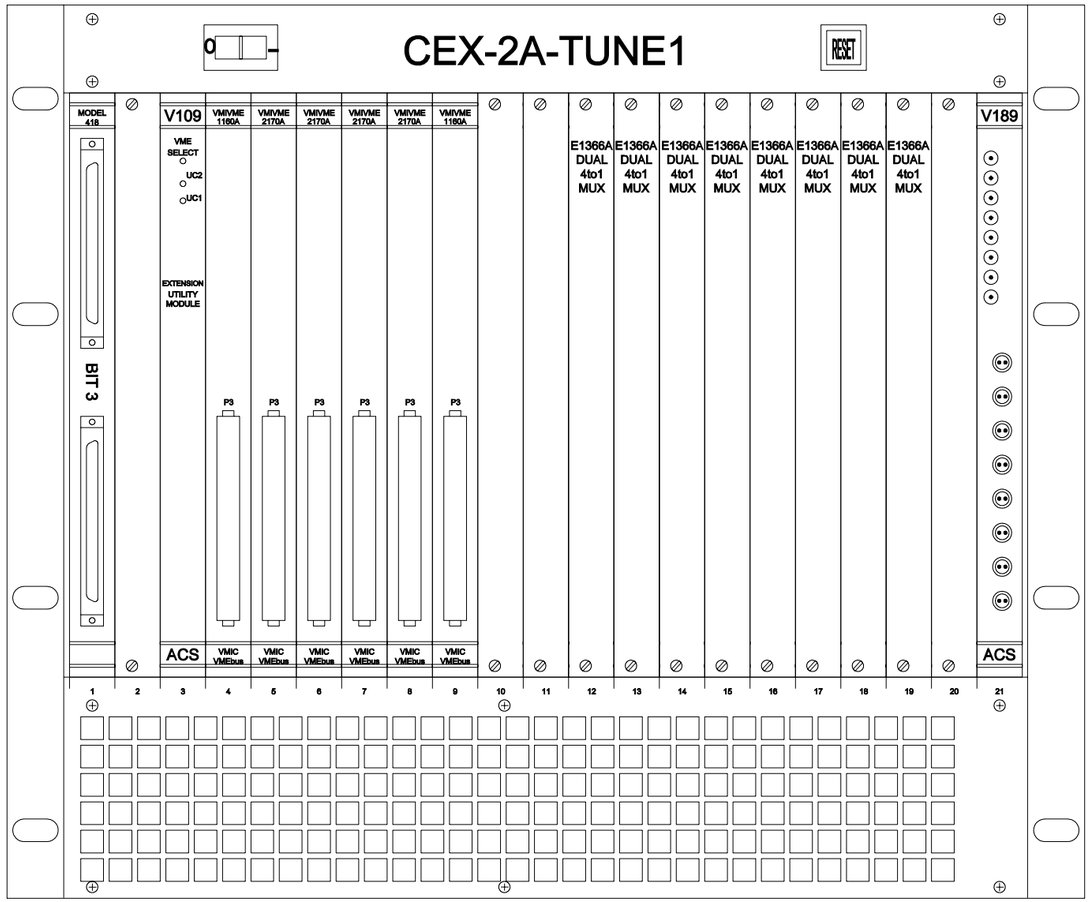
INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989	Q.A. CATEGORY A-3	DATE	BROOKHAVEN NATIONAL LABORATORY	
	DRAWN BY Ed Koropsak	5/6/03	UPTON, N.Y. 11973	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CHECKED BY		RHIC CONTROLS	
DECIMAL TOLERANCES .X ±.030 .XX ±.015 .XXX ±.005 ANGULAR TOLERANCE ± .5°	DESIGN APPROVAL		SERVICE BLDG. 1002A TUNE METER	
	ENGINEER APPROVAL Rob Michnoff		VME CHASSIS CFE-2A-TUNE1	
	SUPVR. APPROVAL		SIZE D / 94028825 / REV. A	
NA FINISH	BREAK SHARP EDGES MAX. XX MIN. XX	NEXT ASSEMBLY	DRAWING NUMBER	
OUTSTANDING ECN			MATERIAL: / SCALE: NA / WEIGHT:	SHEET 1 OF 2

*AUTOCAD

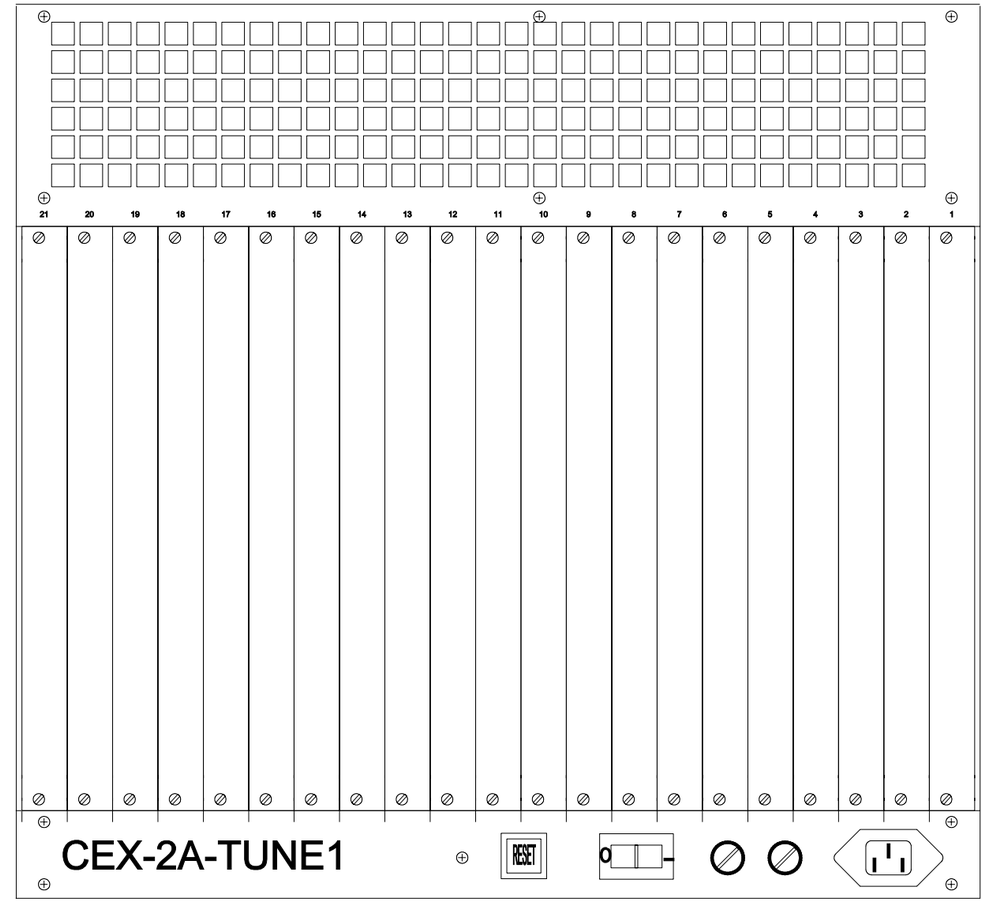
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

Controls, C-AD 5/13/2003 10:38 AM 8825_2.dwg

FRONT VIEW



REAR VIEW



NOTE 1:

ALL UNUSED SLOTS REQUIRE BLANK PANELS.

QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.BNL NO.
		25	SEE NOTE 1	7	VME BLANK PANEL (ELECTRO-SPACE ESFE-2985)	
		8	SLOT 12-19	8	DUAL 4 To 1 MUX	HP E1366A
		4	SLOT 5-8	6	32 CHAN DIGITAL OUTPUT MODULE, HIGH CURRENT OUTPUT (300mA)	VMI VME 2170A-210
		2	SLOT 4,9	5	32 CHAN DIGITAL INPUT MODULE	VMIVME 1160A-201
		1	SLOT 21	4	V189 ECL TO TTL CONVERTER	94028856
		1	SLOT 3	3	V109 UTILITY MODULE	94028150
		1	SLOT 1	2	BIT 3 BUS EXTENDER	MODEL 418-101
		1	N/A	1	VME CHASSIS	RHIC-93008000

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE
± .5°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Rob Michnoff	9/10/2002
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

BLDG. 1002A TUNE METER

VME CHASSIS CEX-2A-TUNE1

SIZE D | DRAWING NUMBER 94028825 | REV. A

MATERIAL: | SCALE: NA | WEIGHT: | SHEET 2 OF 2

*AUTOCAD